

Chung Yuan Christian University Abnormal Workload-Induced Disease Prevention Plan

I. Purpose

In accordance with Article 6, Paragraph 2 of the Occupational Safety and Health Act, this plan for "preventive measures against diseases caused by abnormal workloads such as shift work, night work, and prolonged work" is established to ensure the physical and mental health of relevant workers. The objective is to achieve protection against overwork and effective stress management for workers.

II. Scope

This plan is applicable to workers at the university who experience the following conditions, necessitating the activation of preventive measures for diseases caused by abnormal workloads:

A. Definitions

1. Shift Work: Work requiring irregular day-and-night rotation that might affect sleep, such as alternating between morning, evening, or night shifts.
2. Night Work: Work conducted between 10:00 PM and 6:00 AM the following morning.
3. Prolonged Work: Includes one of the following situations:
 - a. Overtime exceeding 100 hours in one month.
 - b. An average monthly overtime exceeding 80 hours over two to six months.
 - c. An average monthly overtime exceeding 45 hours over one to six months.
 - d. Daily work exceeding 12 hours or continuous work exceeding 7 days or 46 hours of overtime per month.
4. Other Abnormal Workloads: Irregular work patterns, frequent business trips, work environments with extreme temperatures, noise, jet lag, or daily work associated with mental stress and workload-related incidents.

B. Applicable Individuals

This plan applies to workers exposed to risks of overwork and stress due to shift work, night work, or prolonged work.

C. Responsibilities

1. Environmental Protection and Occupational Safety and Health Center
 - a. Participate in and assist with the planning, promotion, and implementation of the prevention plan.
 - b. Assist in risk assessment related to work hazards.
 - c. Based on the risk assessment, assist in work adjustment, replacement, and the implementation of workplace improvement measures.
2. Occupational Health Nurses

- a. Responsible for planning, promoting, and implementing overwork and stress management programs.
 - b. Conduct risk assessments in accordance with management plans.
 - c. Assist in executing the management plan based on risk assessment results.
 - d. Regularly review and report the progress of the management plan, ensuring its effectiveness.
3. Occupational Physicians
- a. Participate in and assist with the planning, promotion, and execution of overwork and stress management programs.
 - b. Conduct periodic reviews and risk assessments according to the management schedule.
 - c. Provide written risk notifications, health guidance, work adjustments or replacements, and other health protection measures based on the assessment results.

III. Implementation Process for the Prevention Plan

A. Identification and Assessment of High-Risk Groups for Disease

1. Case Evaluation and Management

Workers are screened based on working hours and relevant data to identify those with shift work, night work, or prolonged workloads. These individuals will undergo case management.

2. Work Overload Risk Assessment

Brain and cardiovascular diseases caused by work overload are assessed by objectively identifying patient conditions beyond the effects of aging, lifestyle, and diet. The evaluation incorporates workplace risk factors and cerebrovascular risk indicators. Workers must complete the "Overwork Scale" questionnaire (Appendix 1) during annual health check-ups. Based on the "KARO Index Overwork Risk Assessment Table" (Appendix 2) and the "Overwork Assessment Form" (Appendix 3), occupational health nurses will determine whether consultations on workload overload are necessary.

B. Providing Occupational Physician Consultations and Health Guidance

1. Workers classified as "low risk" typically do not require consultations. Those identified as "moderate risk" may consult occupational physicians for guidance. If the worker opts not to participate, occupational health nurses will regularly provide health-related information and encourage self-management with periodic follow-ups.
2. Workers classified as "high risk" are evaluated for cerebrovascular and cardiovascular risks. The occupational physician assesses whether consultation or additional health management measures are necessary. To facilitate evaluation, the

worker's work schedule (including overtime and shifts), job nature, health check results, and workplace conditions must be provided in advance. Occupational health nurses will assist in scheduling consultations.

C. Adjusting or Reducing Work Hours and Modifying Job Content

When the occupational physician identifies significant risk factors, department heads must refer to the "Guidelines for Preventing Diseases Caused by Abnormal Workloads" and the physician's recommendations. Measures may include adjusting job content, reducing work hours, or workplace improvements to eliminate or mitigate risk factors. Work adjustments may involve changes to the work location, job content, or responsibilities, and reductions in work time or workload. Subsequent health tracking will be conducted by occupational physicians or health nurses. Workers engaged in shift work, night work, or prolonged workloads, or those with changes in health or job status, should promptly notify the occupational health nurse for adjustments to the management plan.

D. Health Checks, Management, and Promotion

1. Regular health checks and anomaly management involve statistical analysis of indicators such as:
 - a. Implementation Rate of Regular Health Checks: $(\text{Number of health checks conducted} / \text{Total number of employees}) \times 100\%$ (Target: 100%).
 - b. Abnormal Findings Rate: $(\text{Number of abnormalities} / \text{Number of examinees}) \times 100\%$.
2. Health promotion initiatives include workplace exercise programs, physical fitness assessments, medical consultation services, workplace sports clubs, social activities, and encouragement to engage in external recreational activities.

E. Evaluation and Improvement of Effectiveness

1. Results are recorded in the "Execution Record for Prevention of Diseases Caused by Abnormal Workloads" (Appendix 4). Regular reviews and improvements are conducted during Environmental Protection and Occupational Safety and Health Committee meetings.
2. High-risk groups receive health guidance and follow-ups. Data is compiled in case management forms and retained for three years. All personal data complies with privacy protection laws.

IV. Other Provisions

- A. Work Hours Disputes: To prevent disputes regarding the recognition of working hours, it is essential to establish provisions within the workplace rules in accordance with the Labor Standards Act. These provisions must be submitted to the competent authority for approval and made publicly available as a reference for both employers and employees.

B. Prevention of Overwork: Strategies to reduce stress factors and prevent overwork include:

Adequate sleep, Healthy exercise, Relaxation and stress relief, Nutritious diets, Social support.

C. Plan Approval and Implementation

This plan shall take effect following approval by the Environmental Protection and Occupational Safety and Health Committee and the president's announcement.

Amendments shall follow the same procedure.

Appendix 1: Chung Yuan Christian University Overwork Measurement Form

Personal Fatigue Assessment

1. Do you often feel fatigued?
 (1) Always (2) Often (3) Sometimes (4) Rarely (5) Never
2. Do you feel physically exhausted?
 (1) Always (2) Often (3) Sometimes (4) Rarely (5) Never
3. Do you feel emotionally drained?
 (1) Always (2) Often (3) Sometimes (4) Rarely (5) Never
4. Do you often feel like "I can't go on anymore"?
 (1) Always (2) Often (3) Sometimes (4) Rarely (5) Never
5. Do you feel completely exhausted?
 (1) Always (2) Often (3) Sometimes (4) Rarely (5) Never
6. Do you feel weak or as though you're about to fall ill?
 (1) Always (2) Often (3) Sometimes (4) Rarely (5) Never

Work-Related Fatigue

1. Does your job leave you emotionally and mentally drained?
 (Severely) (Quite severe) (Moderate) (Mild) (Very mild)
2. Does your job make you feel on the verge of being completely exhausted?
 (Severely) (Quite severe) (Moderate) (Mild) (Very mild)
3. Does your job make you feel frustrated?
 (Severely) (Quite severe) (Moderate) (Mild) (Very mild)
4. Do you feel completely exhausted after a full day of work?
 (Always) (Often) (Sometimes) (Rarely) (Never or almost never)
5. Before starting work for the day, do you feel drained just thinking about having to work?
 (1) Always (2) Often (3) Sometimes (4) Rarely (5) Never or almost never
6. Do you find every moment at work to be unbearable?
 (1) Always (2) Often (3) Sometimes (4) Rarely (5) Never or almost never
7. When you're not working, do you have enough energy to spend time with friends or family?
 (1) Always (2) Often (3) Sometimes (4) Rarely (5) Never or almost never

Monthly Overtime Hours

In the past six months, what was the highest number of overtime hours worked in a single month?

- (1) Less than 45 hours (2) 45–80 hours (3) More than 80 hours

Scoring Instructions

1. **Score Conversion:** Convert the response scores as follows:
(1) 100 points, (2) 75 points, (3) 50 points, (4) 25 points, (5) 0 points.
2. **Personal Fatigue Score:** Add up the scores for Questions 1–6, then divide by 6 to calculate the personal fatigue score.
3. **Work-Related Fatigue Score:** Convert the scores for Questions 1–6 as above. For Question 7 (a reverse-scored question), convert as follows:
(1) 0 points, (2) 25 points, (3) 50 points, (4) 75 points, (5) 100 points.
Add up the scores for Questions 1–7, then divide by 7 to calculate the work-related fatigue score.

Fatigue Types and Scores

Fatigue Type	Score	Grade	Explanation
Personal Fatigue	50 or below	Mild	Your overload level is mild. You rarely feel fatigued, physically drained, exhausted, or weak as if becoming ill.
	50–70	Moderate	Your personal overload level is moderate. You sometimes feel fatigued, physically drained, exhausted, or weak as if becoming ill. It is recommended to identify stress sources in your life and adjust accordingly, while increasing relaxation and rest time.
	Above 70	Severe	Your personal overload level is severe. You frequently feel fatigued, physically drained, exhausted, or weak as if becoming ill. It is advised to make lifestyle changes, increase exercise and leisure time, and seek professional consultation if needed.
Work-Related Fatigue	45 or below	Mild	Your work-related overload level is mild. Your work does not often leave you feeling powerless, emotionally exhausted, or frustrated.
	45–60	Moderate	Your work-related overload level is moderate. You sometimes feel powerless, disinterested, or slightly frustrated with your work.
	Above 60	Severe	Your work-related overload level is severe. You may feel on the verge of burnout, emotionally drained, and frustrated, finding work unbearable. You may lack leisure time or the opportunity to spend with family and friends. It is recommended to adjust your lifestyle, increase

Fatigue Type	Score	Grade	Explanation
			exercise and leisure time, and seek professional consultation if necessary.

Appendix 2: KARO Index Overwork Risk Assessment Table

Health and Workload Indicators

- **Cerebrovascular and Cardiovascular Risk**
 1. **Level 0:** No Metabolic Syndrome (Mets) factors present.
 2. **Level 1:** Any 1–2 Mets factors present.
 3. **Level 2:** High blood pressure, diabetes, or Metabolic Syndrome.
- **Fatigue Risk**
 1. **Level 0:** Personal fatigue <50 and work fatigue <45.
 2. **Level 1:** Any of the following:
 - Not categorized as Level 0 or Level 2.
 - Engages in night shifts.
 3. **Level 2:** Any of the following:
 - Personal fatigue >70 or work fatigue >60.
 - excessive on-campus overtime.

Appendix 3: Chung Yuan Christian University Overwork Assessment Form

Personal Information

- **Name:**
- **Gender:** Male Female
- **Date of Birth:** YYYY/MM/DD
- **Employee Code:**
- **Department:**
- **Date of Completion:** YYYY/MM/DD
- **Job Title:**

Personal Medical History (Diagnosed by a Physician, Multiple Selections Allowed)

- Cardiovascular Diseases (e.g., Angina Coronary Heart Disease Myocardial Infarction
- Stent Placement Coronary Artery Bypass Coronary Artery Disease Medication
- Hypertension Arrhythmia Other: _____)
- Stroke
- Lipid Abnormalities
- Sleep-Related Respiratory Disorders (e.g., Sleep Apnea)
- Central Nervous System Disorders (e.g., Epilepsy, Spinal Disorders)
- Peripheral Nervous System Disorders (e.g., Carpal Tunnel Syndrome)
- Emotional or Psychological Disorders
- Eye Diseases (excluding correctable myopia or hyperopia)
- Hearing Loss
- Limb Disorders (e.g., conditions causing joint stiffness or weakness)
- Diabetes
- Asthma
- Long-term Medication (Specify: _____)
- Other: _____
- None of the Above

Family Medical History

- None
- Immediate family (e.g., parents, grandparents, children) with angina or heart disease before age 55 (male) or 65 (female).
- Family history of stroke.
- Other: _____

Lifestyle and Habits

1. **Smoking**

None Yes (_____ packs/day for _____ years) Quit Smoking (for _____ years)

2. **Betel Nut**

None Yes (_____ pieces/day for _____ years) Quit (for _____ years)

3. **Alcohol Consumption**

None Yes (Type: _____, Frequency: _____, Volume: _____ ml)

4. **Irregular Meal Times**

No Yes; Frequency of Eating Out: None Once Twice Thrice a Day

5. **Perceived Lack of Sleep**

No Yes (Weekday Average: _____ hours/day; Weekend Average: _____ hours/day)

6. **Exercise Habits**

None Yes (_____ times/week for _____ minutes/session)

7. **Other Habits:** _____

Work-Related Factors (Information Provided by HR as Needed)

1. **Working Hours:**

Average Daily: _____ hours; Average Weekly: _____ hours; Monthly Overtime: _____ hours.

2. **Work Schedule:**

Day Shift Night Shift Rotating Shifts (Regular Irregular; Shift Pattern: _____).

3. **Work Environment (Select All That Apply):**

Noise (_____ dB) Abnormal Temperature (High: _____ °C; Low: _____ °C) Poor Ventilation
 Poor Ergonomic Design (e.g., seating, vibration, manual handling) None of the Above

4. **High-Stress Daily Workload (Select All That Apply):**

Dangerous tasks threatening life or property.
 Hazard avoidance responsibilities.
 Work involving life-or-death decisions or critical judgments.
 Handling high-risk materials.
 Tasks with substantial societal financial responsibility.
 Excessive or overly strict deadlines.
 Challenging tasks with tight schedules.

- Resolving significant client conflicts or complex labor disputes.
 - Isolated or unsupported work conditions.
 - Complex development projects or organizational restructuring.
 - None of the Above
5. **Any Work-Related Sudden Incidents (e.g., recent accidents or major vehicle breakdowns)?**
 No Yes (Specify: _____)
 6. **Workplace Cultural or Justice Issues (e.g., conflicts, poor communication)?**
 No Yes (Specify: _____)
 7. **Frequent Changes or Unpredictable Work Assignments with Short Notice?**
 No Yes (Specify: _____)
 8. **Frequent Business Trips Involving Fatigue (e.g., jet lag, inadequate rest, poor accommodations)?**
 No Yes (Specify: _____)

Non-Work-Related Factors

1. **Family Issues:** None Yes (Specify: _____)
2. **Economic Issues:** None Yes (Specify: _____)

Overwork Assessment

1. **Cardiovascular Disease Risk:** Low Moderate High Very High Other:

2. **Workload Risk:** Low Moderate High Other: _____
3. **Overall Overwork Risk:** Low Moderate High Other: _____

Evaluator's Title/Signature:

Date: _____ YYYY/MM/DD

Appendix 4: Chung Yuan Christian University Abnormal Workload-Induced Disease Execution Record Form

Execution Items

- **Identification and Evaluation of High-Risk Groups**
 1. Individuals with high-risk abnormal workloads: _____ persons.
- **Arranging Physician Consultations and Health Guidance**
 1. Workers requiring physician consultations: _____ persons.
 - Further observation or follow-up required: _____ persons.
 - Medical intervention needed: _____ persons.
 2. Workers requiring health guidance: _____ persons.
 - Already received guidance: _____ persons.
- **Adjusting or Reducing Work Hours and Modifying Job Content**
 1. Workers requiring work hour adjustments: _____ persons.
 2. Workers requiring job changes: _____ persons.
- **Health Checks, Management, and Promotion**
 1. Workers requiring health checks: _____ persons.
 - Health check completed: _____ persons.
 - Abnormal findings: _____ persons.
 - Re-examination required: _____ persons.
 2. Workers requiring regular follow-ups: _____ persons.
 3. Participants in health promotion activities: _____ persons.